CLAIMS

1. Use of at least one recombinant human antibody or antibody fragment directed towards at least one oxidized fragment of apolipoprotein B in the manufacture of a pharmaceutical composition for therapeutical or prophylactical treatment of atherosclerosis by means of passive immunization.

2. The use according to claim 1, wherein the oxidized fragment is selected from one or more of the group consisting of
FLDTVYGNCSTHFTVKTRKG
PQCSTHILQWLKRVHANPLL
VISIPRLQAEARSEILAHWS
KLVKEALKESQLPTVMDFRK
LKFVTQAEGAKQTEATMTFK
DGSLRHKFLDSNIKFSHVEK
KGTYGLSCQRDPNTGRLNGE
RLNGESNLRFNSSYLQGTNQ
SLTSTSDLQSGIIKNTASLK
TASLKYENYELTLKSDTNGK
DMTFSKQNALLRSEYQADYE
MKVKIIRTIDQMQNSELQWP
IALDDAKINFNEKLSQLQTY
KTTKQSFDLSVKAQYKKNKH
EEEMLENVSLVCPKDATRFK
GSTSHHLVSRKSISAALEHK
IENIDFNKSGSSTASWIQNV
IREVTQRLNGEIQALELPQK
EVDVLTKYSQPEDSLIPFFE
HTFLIYITELLKKLQSTTVM
LLDIANYLMEQIQDDCTGDE
CTGDEDYTYKIKRVIGNMGQ
GNMGQTMEQLTPELKSSILK
SSILKCVQSTKPSLMIQKAA
IQKAAIQALRKMEPKDKDQE
RLNGESNLRFNSSYLQGTNQ
SLNSHGLELNADILGTDKIN
WIQNVDTKYQIRIQIEKLQ

TYISDWWTLAAKNLTDFAEQ
EATLQRIYSLWEHSTKNHLQ
ALLVPPETEEAKQVLFLDTV
IEIGLEGKGFEPTLEALFGK
SGASMKLTTNGRFREHNAKF
NLIGDFEVAEKINAFRAKVH
GHSVLTAKGMALFGEGKAEF
FKSSVITLNTNAELFNQSDI
FPDLGQEVALNANTKNQKIR,
or an active site thereof.

3. The use according to claim 1, wherein the fragment has been oxidized using malone dealdehyde.

4. The use according to claim 1, wherein the fragment has been oxidized using copper.

5. The use according to claim 1, wherein the antibody comprises the variable heavy region(V_H) selected from the group of nucleic acid sequences consisting of

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCC
TGTGCAGCCTCTGGATTCACCTTCAATAACGCCTGGATGAGCTGGGTCCGCCAGGCTCCAGGGA
AGGGGCTGGAGTGGGTCTCATCCATTAGTAGTAGTAGTAGTTACATATACTACGCAGACTCAGT
GAAGGGCCGATTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGC
CTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAGAGTCAGTAGGTACTACTACGGACCAT
CTTTCTACTTTGACTCCTGGGGCCAGGGTACACTGGTCACCGTGAGCAGC (SEQ. ID. NO. 1)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCC
TGTGCGGCCTCTGGATTCACCTTCAGTGACTACTACATGAGCTGGGTCCGCCAGGCTCCCGGGA
AGGGGCTGGAGTGGGTATCGGGTGTTAGTTGGAATGGCAGTAGGACGCACTATGCAGACTCTG
TGAAGGGCCGATTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAG
CCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAGAGCGGCTAGGTACTCCTACTACTAC
TACGGTATGGACGTCTGGGGCCAAGGTACACTGGTCACCGTGAGCAGC (SEQ. ID. NO. 3)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCC
TGTGCAGCCTCTGGATTCACCTTTAGTAGCTATTGGATGAGCTGGGTCCGCCAGGCTCCAGGGA
AGGGGCTGGAGTGGGTCTCAAGTATCAGTGGTAGTGGTCGTAGGACATACTACGCAGACTCCGT
GCAGGGCCGGTTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGC
CTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAGATTGGTCTCCTATGGTTCGGGGAGTT
TCGGTTTTGACTACTGGGGCCAAGGTACACTGGTCACCGTGAGCAGC(SEQ. ID. NO. 5)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCC
TGTGCAGCCTCTGGATTCACCTTCAGTAACGCCTGGATGAGCTGGGTCCGCCAGGTTCCAGGGA
AGGGGCTGGAGTGGGTCTCAACTCTTGGTGGTAGTGGTGGTGGTAGCACATACTACGCAGACTC
CGTGAAGGGCCGGTTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAAC
AGCCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAAGTTAGGGGGGCGATCCCGATAT
GGGCGGTGGCCCCGCCAATTTGACTACTGGGGCCAAGGTACACTGGTCACCGTGAGCAGC
(SEQ. ID. NO. 7)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCC
TGTGCAGCCTCTGGATTCACCTTCAGTGACTACTACATGAGCTGGATCCGCCAGGCTCCAGGGA
AGGGGCTGGAGTGGGTCTCAAGTATCAGTGGCCGTGGGGGTAGTTCCTACTACGCAGACTCCG
TGAGGGGCCGGTTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAG
CCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAGACTTTCCTACAGCTATGGTTACGAG
GGGGCCTACTACTTTGACTACTGGGGCCAGGGTACACTGGTCACCGTGAGCAGC (SEQ. ID.
NO. 9)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCC
TGTGCAGCCTCTGGATTCACCTTTAGCAGCTATGCCATGAGCTGGGTCCGCCAGGCTCCAGGGA
AGGGGCTGGAGTGGGTCTCATCCATTAGTAGTAGTGGTCGTTTCATTTACTACGCAGACTCAATG
AAGGGCCGCTTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCT
GAGAGCCGAGGACACTGCCGTGTATTACTGTACGAGGCTCCGGAGAGGGAGCTACTTCTGGGC
TTTTGATATCTGGGGCCAAGGTACACTGGTCACCGTGAGCAGC (SEQ. ID. NO. 11)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTC
TCCTGTGCAGCCTCTGGATTCACCTTTAGAACGTATTGGATGACCTGGGTCCGCCAGGCT
CCAGGGAAGGGGCTGGAGTGGGTCTCATCTATTAGCAGTAGCAGTAATTACATATTCTAC
GCAGACTCAGTGAAGGGCCGATTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTAT
CTGCAAATGAACAGCCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAGACTCAGA
CGGAGCAGCTGGTACGGGGGGTACTGGTTCGACCCCTGGGGCCAAGGTACACTGGTCACC
GTGAGCTCA (SEQ. ID. NO. 19)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCT
CCTGTGCAGCCTCTGGATTCACCTTCAGTAGCAACTACATGAGCTGGGTCCGCCAGGCTCC
AGGGAAGGGGCTGGAGTGGGTCTCATCCATTAGTAGTAGTAGTAGTTACATATACTACGCA
GACTCAGTGAAGGGCCGATTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGC
AAATGAACAGCCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAGAGTAGGCCGGTA
TAACTGGAAGACGGGGCATGCTTTTGATATCTGGGGCCAGGGTACACTGGTCACCGTGAGC

TCA (SEQ. ID. NO. 21)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCCGTGACTACTACGTGAGCTGGATCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCAAGTATTAGTGGTAGTGGGGGTAGGACATACTACGCAGACTCCGTGGAGGGCCGGTTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACTGCCATGTATTACTGTGCCAGAGTATCCGCCCTTCGGAGACCCATGACTACAGTAACTACTTACTGGTTCGACCCCTGGGGCCAAGGTACACTGGTCACCGTGAGCTCA (SEQ. ID. NO. 23)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTAACGCCTGGATGAGCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCCGCTATTAGTGGTAGTGGTAACACATACTATGCAGACTCCGTGAAGGGCCGGTTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAGAGCCTCCCACCGTATATTAGGTTATGCTTTTGATATCTGGGGCCAGGGTACACTGGTCACCGTGAGCTCA (SEQ. ID. NO. 25)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTAACGCCTGGATGAGCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCAAGTATTAGTGTTGGTGGACATAGGACATATTATGCAGATTCCGTGAAGGGCCGGTCCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCACGGATACGGGTGGGTCCGTCCGGCGGGGCCTTTGACTACTGGGGCCAGGGTACACTGGTCACCGTGAGCTCA (SEQ. ID. NO. 27)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTAACGCCTGGATGAGCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCATCCATTAGTAGTAGTAGTAGTTACATATACTACGCAGACTCAGTGAAGGGCCGATCCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAGGCTCACAAATATTTTGACTGGTTATTATACCTCAGGATATGCTTTTGATATCTGGGGCCAAGGTACACTGGTCACCGTGAGCTCA (SEQ. ID. NO. 29)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTAGTTCTTGGATGAGTTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCATCCATTAGTAGTAGTAGTAGTTACATATACTACGCAGACTCAGTGAAGGGCCGATTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTAT

CTGCAAATGAACAGCCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAGAGTAGGGAACTACGGTTTCTACCACTACATGGACGTCTGGGGCCAAGGTACACTGGTCACCGTGAGCTCA (SEQ. ID. NO. 31)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTTAGTAGCTATTGGATGAGCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCATCCATTAGTAGTAGTAGTAGTTACATATACTACGCAGACTCAGTGAAGGGCCGATTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAGAATTAAACGGTTACGATTCGGCTGGACCCCTTTTGACTACTGGGGCCAGGGTACACTGGTCACCGTGAGCTCA (SEQ. ID. NO. 33)

TCCTGTGCAGCCTCTGGATTCACCTTCAGTAACGCCTGGATGAGCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCATCCATTAGTAGTAGTAGTAGTTACATATACTACGCAGACTCAGTGAAGGGCCGATTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAGAGTCAATAGCAAAAAGTGGTATGAGGGCTACTTCTTTGACTACTGGGGCCAGGGTACACTGGTCACCGTGAGCTCA (SEQ. ID. NO. 35)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTAACGCCTGGATGAGCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCATCCATTAGTACTAGTAGTAATTACATATACTACGCAGACTCAGTGAAGGGCCGGTTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAGAGTCAAGAAGTATAGCAGTGGCTGGTACTCGAATTATGCTTTTGATATCTGGGGCCAAGGTACACTGGTCACCGTGAGCTCA (SEQ. ID. NO. 37)

in combination with a variable light region (V_L) selected from the group of nucleic acid sequences consisting of

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCCTGCTCTGGAAGCAGGTCCAACATTGGGAATAATTATGTATCCTGGTATCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATGGTAACAACAATCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTGCAGCATGGGATGACAGCCTGAATGGTCATTGGGTGTTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT (SEQ. ID. NO. 2)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCCTGTTCTGGAAGCAGCTCCAACATCGGAAATAATGCTGTAAACTGGTATCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATGGGAATGATCGGCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTCAGACCTGGGGCACTGGCCGGGGGGTATTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT (SEQ. ID. NO. 4)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCTTGTTCTGGAAGCAGCTCCAATATCGGAAGTAATTATGTATCCTGGTATCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATGGTAACTACAATCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTGCAGCATGGGATGACAGCCTGAGTGGTTGGGTGTTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT

(SEQ. ID. NO. 6)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCCTGCTCTGGAAGCAGCTCCAACATTGGAAATAACTATGTATCCTGGTATCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATAGTAATAATCAGCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTGCAGCATGGGATGACAGCCTGAGTCATTGGCTGTTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT

(SEQ. ID. NO. 8)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCCTGCTCTGGAAGCAGCTCCAACATTGGGAATAATTATGTATCCTGGTATCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATAGGAATAATCAGCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTTAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTGCAACCTGGGATGACAGCCTGAATGGTTGGGTGTTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT

(SEQ. ID. NO. 10)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCCTGTTCTGGAAGCAGCTCCAACATTGGCGGTGAGTCTGTATCCTGGTATCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATAGTAATAATCAGCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTGCAGCATGGGATGACAGCCTGAATGGTTGGGTGTTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT

(SEQ. ID. NO. 12)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCCTGCTCTGGAAGCAGCTCCAACATTGGGAATAATTATGTATCCTGGTATCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATAGGAATAATCAGCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTGCAGCATGGGATGACAGCCTGAATGGTCATTGGGTGTTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT (SEQ. ID. NO. 20)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCCTGCTCTGGAAGGACCTACAACATTGGAAATAATTATGTATCGTGGTATCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATGGTAACATCAATCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTGCAGCATGGGATGTCAGGCTGAATGGTTGGGTGTTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT (SEQ. ID. NO. 22)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCCTGCTCTGGAAGGAGCTCCAACATTGGGAATAGTTATGTCTCCTGGTATCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATAGGAATAATCAGCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTGCAGGATGGGATGACACCCTGCGTGCTTGGGTGTTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT (SEQ. ID. NO. 24)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCTTGTTCTGGAAGCCGCTCCAACATCGGGAGAAATGCTGTTAGTTGGTATCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATGCTAACAGCAATCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTGCAGCATGGGATGGCAGCCTGAATGGTTGGGTGTTCGGCGGAGGAACCAAGCTGACGGTCC (SEQ. ID. NO. 26)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCCTGCTCTGGAAGCAACACCAACATTGGGAAGAACTATGTATCTTGGTATCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATGCTAATAGCAATCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTGCGTCATGGGATGCCAGCCTGAATGGTTGGGTATTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT (SEQ. ID. NO. 28)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCCTGCTCTGGAAGCACCTCCAACATTGGGAAGAATTATGTATCCTGGTATCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATGGTAACAGCAATCGGCCCTCAGGGGTCCCT

GACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTGCAGCATGGGATGCCAGCCTCAGTGGTTGGGTGTTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT (SEQ. ID. NO. 30)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCTTGTTCTGGAGGCAGCTCAAACATCGGAAAAAGAGGTGTAAATTGGTATCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATGGTAACAGAAATCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTGCTACATGGGATTACAGCCTCAATGCTTGGGTGTTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT (SEQ. ID. NO. 32)

CAGTCTGTTCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCCTGTTCTGGAAGCAGCTCCAACATCGGAAATAATGGTGTAAACTGGTATCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATGGTAACAACAATCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTGCAGCATGGGATGACAGCCTGCGTGGTTGGCTGTTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT (SEQ. ID. NO. 34)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCCTGCTCTGGAAGCAGCTCCAACATTGGGAATAATTATGTATCCTGGTATCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATGGTAACAGCAATCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTGCAGCATGGGATGACAGTCTGAGTGGTTGGGTGTTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT (SEQ. ID. NO. 36)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCCTGCTCTGGAAGCAGCTCCAGCATTGGGAATAATTTTGTATCCTGGTATCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATGACAATAATAAGCGACCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTGCAGCATGGGATGACAGCCTGAATGGTTGGGTGTTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT (SEQ. ID. NO. 38).

6. The use according to claim 5, wherein the antibody comprises the variable heavy region(V_H)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAATAACGCCTGGATGAGCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCATCCATTAGTAGTAGTAGTAGTTACATATACTACGCAGACTCAGTGAAGGGCCGATTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGC

CTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAGAGTCAGTAGGTACTACTACGGACCATCTTTCTACTTTGACTCCTGGGGCCAGGGTACACTGGTCACCGTGAGCAGC

and the variable light region (V_L)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCCTGCTCTGGAAGCAGGTCCAACATTGGGAATAATTATGTATCCTGGTATCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATGGTAACAACAATCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTGCAGCATGGGATGACAGCCTGAATGGTCATTGGGTGTTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT.

7. The use according to claim 5, wherein the antibody comprises the variable heavy region (V_H)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCGGCCTCTGGATTCACCTTCAGTGACTACTACATGAGCTGGGTCCGCCAGGCTCCCGGGAAGGGGCTGGAGTGGGTATCGGGTGTTAGTTGGAATGGCAGTAGGACGCACTATGCAGACTCTGTGAAGGGCCGATTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAGAGCGGCTAGGTACTCCTACTACTACTACGGTATGGACGTCTGGGGCCAAGGTACACTGGTCACCGTGAGCAGC

and the variable light region (V_L).

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCCTGTTCTGGAAGCAGCTCCAACATCGGAAATAATGCTGTAAACTGGTATCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATGGGAATGATCGGCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTCAGACCTGGGGCACTGGCCGGGGGGTATTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT.

8. The use according to claim 5, wherein the antibody comprises the variable heavy region (V_H)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTTAGTAGCTATTGGATGAGCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCAAGTATCAGTGGTAGTGGTCGTAGGACATACTACGCAGACTCCGTGCAGGGCCGGTTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGC

CTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAGATTGGTCTCCTATGGTTCGGGGAGTTTCGGTTTTGACTACTGGGGCCAAGGTACACTGGTCACCGTGAGCAGC

and the variable light region (V_L)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCTTGTTCTGGAAGCAGCTCCAATATCGGAAGTAATTATGTATCCTGGTATCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATGGTAACTACAATCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTGCAGCATGGGATGACAGCCTGAGTGGTTGGGTGTTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT.

9. The use according to claim 5, wherein the antibody comprises the variable heavy region (V_H)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTAACGCCTGGATGAGCTGGGTCCGCCAGGTTCCAGGGAAGGGGCTGGAGTGGGTCTCAACTCTTGGTGGTAGTGGTGGTGGTAGCACATACTACGCAGACTCCGTGAAGGGCCGGTTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAAGTTAGGGGGGCGATCCCGATATGGGCGGTGGCCCCGCCAATTTGACTACTGGGGCCAAGGTACACTGGTCACCGTGAGCAGC

and the variable light region (V_L)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCCTGCTCTGGAAGCAGCTCCAACATTGGAAATAACTATGTATCCTGGTATCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATAGTAATAATCAGCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTGCAGCATGGGATGACAGCCTGAGTCATTGGCTGTTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT.

10. The use according to claim 5, wherein the antibody comprises the variable heavy region (V_H)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTGACTACTACATGAGCTGGATCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCAAGTATCAGTGGCCGTGGGGGTAGTTCCTACTACGCAGACTCCGTGAGGGGCCGGTTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAG

CCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAGACTTTCCTACAGCTATGGTTACGAG
GGGGCCTACTACTTTGACTACTGGGGCCAGGGTACACTGGTCACCGTGAGCAGC

and the variable light region (V_L

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCCT
GCTCTGGAAGCAGCTCCAACATTGGGAATAATTATGTATCCTGGTATCAGCAGCTCCCAGGAAC
GGCCCCCAAACTCCTCATCTATAGGAATAATCAGCGGCCCTCAGGGGTCCCTGACCGATTCTCT
GGCTCCAAGTCTGGCACCTTAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCT
GATTATTACTGTGCAACCTGGGATGACAGCCTGAATGGTTGGGTGTTCGGCGGAGGAACCAAGC
TGACGGTCCTAGGT.

11. The use according to claim 5, wherein the antibody comprises the variable heavy region (V_H)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCC
TGTGCAGCCTCTGGATTCACCTTTAGCAGCTATGCCATGAGCTGGGTCCGCCAGGCTCCAGGGA
AGGGGCTGGAGTGGGTCTCATCCATTAGTAGTAGTGGTCGTTTCATTTACTACGCAGACTCAATG
AAGGGCCGCTTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCT
GAGAGCCGAGGACACTGCCGTGTATTACTGTACGAGGCTCCGGAGAGGGAGCTACTTCTGGGC
TTTTGATATCTGGGGCCAAGGTACACTGGTCACCGTGAGCAGC

and the variable light region (V_L)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCCT
GTTCTGGAAGCAGCTCCAACATTGGCGGTGAGTCTGTATCCTGGTATCAGCAGCTCCCAGGAAC
GGCCCCCAAACTCCTCATCTATAGTAATAATCAGCGGCCCTCAGGGGTCCCTGACCGATTCTCTG
GCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTG
ATTATTACTGTGCAGCATGGGATGACAGCCTGAATGGTTGGGTGTTCGGCGGAGGAACCAAGCT
GACGGTCCTAGGT.

12. The use according to claim 5, wherein the antibody comprises the variable heavy region (V_H)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTC
TCCTGTGCAGCCTCTGGATTCACCTTTAGAACGTATTGGATGACCTGGGTCCGCCAGGCT
CCAGGGAAGGGGCTGGAGTGGGTCTCATCTATTAGCAGTAGCAGTAATTACATATTCTAC
GCAGACTCAGTGAAGGGCCGATTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTAT
CTGCAAATGAACAGCCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAGACTCAGA

CGGAGCAGCTGGTACGGGGGGTACTGGTTCGACCCCTGGGGCCAAGGTACACTGGTCACCGTGAGCTCA

and the variable light region (V_L)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCCTGCTCTGGAAGCAGCTCCAACATTGGGAATAATTATGTATCCTGGTATCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATAGGAATAATCAGCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTGCAGCATGGGATGACAGCCTGAATGGTCATTGGGTGTTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT.

13. The use according to claim 5, wherein the antibody comprises the variable heavy region (V_H)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTAGCAACTACATGAGCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCATCCATTAGTAGTAGTAGTAGTTACATATACTACGCAGACTCAGTGAAGGGCCGATTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAGAGTAGGCCGGTATAACTGGAAGACGGGGCATGCTTTTGATATCTGGGGCCAGGGTACACTGGTCACCGTGAGCTCA

and the variable light region (V_L)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCCTGCTCTGGAAGGACCTACAACATTGGAAATAATTATGTATCGTGGTATCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATGGTAACATCAATCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTGCAGCATGGGATGTCAGGCTGAATGGTTGGGTGTTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT.

14. The use according to claim 5, wherein the antibody comprises the variable heavy region (V_H)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCCGTGACTACTACGTGAGCTGGATCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCAAGTATTAGTGGTAGTGGGGGTAGGACATACTAC

GCAGACTCCGTGGAGGGCCGGTTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACTGCCATGTATTACTGTGCCAGAGTATCCGCCCTTCGGAGACCCATGACTACAGTAACTACTTACTGGTTCGACCCCTGGGGCCAAGGTACACTGGTCACCGTGAGCTCA

and the variable light region (V$_L$)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCCTGCTCTGGAAGGAGCTCCAACATTGGGAATAGTTATGTCTCCTGGTATCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATAGGAATAATCAGCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTGCAGGATGGGATGACACCCTGCGTGCTTGGGTGTTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT.

15. The use according to claim 5, wherein the antibody comprises the variable heavy region (V$_H$)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTAACGCCTGGATGAGCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCCGCTATTAGTGGTAGTGGTAACACATACTATGCAGACTCCGTGAAGGGCCGGTTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAGAGCCTCCCACCGTATATTAGGTTATGCTTTTGATATCTGGGGCCAGGGTACACTGGTCACCGTGAGCTCA

and the variable light region (V$_L$)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCTTGTTCTGGAAGCCGCTCCAACATCGGGAGAAATGCTGTTAGTTGGTATCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATGCTAACAGCAATCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTGCAGCATGGGATGGCAGCCTGAATGGTTGGGTGTTCGGCGGAGGAACCAAGCTGACGGTCC.

16. The use according to claim 5, wherein the antibody comprises the variable heavy region (V$_H$)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTAACGCCTGGATGAGCTGGGTCCGCCAGGCT

CCAGGGAAGGGGCTGGAGTGGGTCTCAAGTATTAGTGTTGGTGGACATAGGACATATTATGCAGATTCCGTGAAGGGCCGGTCCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCACGGATACGGGTGGGTCCGTCCGGCGGGGCCTTTGACTACTGGGGCCAGGGTACACTGGTCACCGTGAGCTCA

and the variable light region (V_L)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCCTGCTCTGGAAGCAACACCAACATTGGGAAGAACTATGTATCTTGGTATCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATGCTAATAGCAATCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTGCGTCATGGGATGCCAGCCTGAATGGTTGGGTATTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT.

17. The use according to claim 5, wherein the antibody comprises the variable heavy region (V_H)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTAACGCCTGGATGAGCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCATCCATTAGTAGTAGTAGTAGTTACATATACTACGCAGACTCAGTGAAGGGCCGATCCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAGGCTCACAAATATTTTGACTGGTTATTATACCTCAGGATATGCTTTTGATATCTGGGGCCAAGGTACACTGGTCACCGTGAGCTCA

and the variable light region (V_L)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCCTGCTCTGGAAGCACCTCCAACATTGGGAAGAATTATGTATCCTGGTATCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATGGTAACAGCAATCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTGCAGCATGGGATGCCAGCCTCAGTGGTTGGGTGTTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT.

18. The use according to claim 5, wherein the antibody comprises the variable heavy region (V_H)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTC

TCCTGTGCAGCCTCTGGATTCACCTTCAGTAGTTCTTGGATGAGTTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCATCCATTAGTAGTAGTAGTAGTTACATATACTACGCAGACTCAGTGAAGGGCCGATTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAGAGTAGGGAACTACGGTTTCTACCACTACATGGACGTCTGGGGCCAAGGTACACTGGTCACCGTGAGCTCA

and the variable light region (V_L)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCTTGTTCTGGAGGCAGCTCAAACATCGGAAAAAGAGGTGTAAATTGGTATCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATGGTAACAGAAATCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTGCTACATGGGATTACAGCCTCAATGCTTGGGTGTTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT.

19. The use according to claim 5, wherein the antibody comprises the variable heavy region (V_H)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTTAGTAGCTATTGGATGAGCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCATCCATTAGTAGTAGTAGTAGTTACATATACTACGCAGACTCAGTGAAGGGCCGATTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAGAATTAAACGGTTACGATTCGGCTGGACCCCTTTTGACTACTGGGGCCAGGGTACACTGGTCACCGTGAGCTCA

and the variable light region (V_L)

CAGTCTGTTCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCCTGTTCTGGAAGCAGCTCCAACATCGGAAATAATGGTGTAAACTGGTATCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATGGTAACAACAATCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTGCAGCATGGGATGACAGCCTGCGTGGTTGGCTGTTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT.

20. The use according to claim 5, wherein the antibody comprises the variable heavy region (V_H)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTAACGCCTGGATGAGCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCATCCATTAGTAGTAGTAGTAGTTACATATACTACGCAGACTCAGTGAAGGGCCGATTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAGAGTCAATAGCAAAAAGTGGTATGAGGGCTACTTCTTTGACTACTGGGGCCAGGGTACACTGGTCACCGTGAGCTCA

and the variable light region (V_L)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCCTGCTCTGGAAGCAGCTCCAACATTGGGAATAATTATGTATCCTGGTATCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATGGTAACAGCAATCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTGCAGCATGGGATGACAGTCTGAGTGGTTGGGTGTTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT.

21. The use according to claim 5, wherein the antibody comprises the variable heavy region (V_H)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTAACGCCTGGATGAGCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCATCCATTAGTACTAGTAGTAATTACATATACTACGCAGACTCAGTGAAGGGCCGGTTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAGAGTCAAGAAGTATAGCAGTGGCTGGTACTCGAATTATGCTTTTGATATCTGGGGCCAAGGTACACTGGTCACCGTGAGCTCA

and the variable light region (V_L)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCCTGCTCTGGAAGCAGCTCCAGCATTGGGAATAATTTTGTATCCTGGTATCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATGACAATAATAAGCGACCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTGCAGCATGGGATGACAGCCTGAATGGTTGGGTGTTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT.

22. Antibodies raised against fragments of apo B100 comprising a variable heavy region (V_H) selected from the group of nucleic acid sequences consisting of

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAATAACGCCTGGATGAGCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCATCCATTAGTAGTAGTAGTAGTTACATATACTACGCAGACTCAGTGAAGGGCCGATTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAGAGTCAGTAGGTACTACTACGGACCATCTTTCTACTTTGACTCCTGGGGCCAGGGTACACTGGTCACCGTGAGCAGC (SEQ. ID. NO. 1)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCGGCCTCTGGATTCACCTTCAGTGACTACTACATGAGCTGGGTCCGCCAGGCTCCCGGGAAGGGGCTGGAGTGGGTATCGGGTGTTAGTTGGAATGGCAGTAGGACGCACTATGCAGACTCTGTGAAGGGCCGATTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAGAGCGGCTAGGTACTCCTACTACTACTACGGTATGGACGTCTGGGGCCAAGGTACACTGGTCACCGTGAGCAGC (SEQ. ID. NO. 3)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTTAGTAGCTATTGGATGAGCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCAAGTATCAGTGGTAGTGGTCGTAGGACATACTACGCAGACTCCGTGCAGGGCCGGTTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAGATTGGTCTCCTATGGTTCGGGGAGTTTCGGTTTTGACTACTGGGGCCAAGGTACACTGGTCACCGTGAGCAGC(SEQ. ID. NO. 5)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTAACGCCTGGATGAGCTGGGTCCGCCAGGTTCCAGGGAAGGGGCTGGAGTGGGTCTCAACTCTTGGTGGTAGTGGTGGTGGTAGCACATACTACGCAGACTCCGTGAAGGGCCGGTTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAAGTTAGGGGGGCGATCCCGATATGGGCGGTGGCCCCGCCAATTTGACTACTGGGGCCAAGGTACACTGGTCACCGTGAGCAGC (SEQ. ID. NO. 7)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTGACTACTACATGAGCTGGATCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCAAGTATCAGTGGCCGTGGGGGTAGTTCCTACTACGCAGACTCCGTGAGGGGCCGGTTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAGACTTTCCTACAGCTATGGTTACGAG

GGGGCCTACTACTTTGACTACTGGGGCCAGGGTACACTGGTCACCGTGAGCAGC (SEQ. ID.
NO. 9)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCC
TGTGCAGCCTCTGGATTCACCTTTAGCAGCTATGCCATGAGCTGGGTCCGCCAGGCTCCAGGGA
AGGGGCTGGAGTGGGTCTCATCCATTAGTAGTAGTGGTCGTTTCATTTACTACGCAGACTCAATG
AAGGGCCGCTTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCT
GAGAGCCGAGGACACTGCCGTGTATTACTGTACGAGGCTCCGGAGAGGGAGCTACTTCTGGGC
TTTTGATATCTGGGGCCAAGGTACACTGGTCACCGTGAGCAGC (SEQ. ID. NO. 11)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTC
TCCTGTGCAGCCTCTGGATTCACCTTTAGAACGTATTGGATGACCTGGGTCCGCCAGGCT
CCAGGGAAGGGGCTGGAGTGGGTCTCATCTATTAGCAGTAGCAGTAATTACATATTCTAC
GCAGACTCAGTGAAGGGCCGATTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTAT
CTGCAAATGAACAGCCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAGACTCAGA
CGGAGCAGCTGGTACGGGGGGTACTGGTTCGACCCCTGGGGCCAAGGTACACTGGTCACC
GTGAGCTCA (SEQ. ID. NO. 19)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCT
CCTGTGCAGCCTCTGGATTCACCTTCAGTAGCAACTACATGAGCTGGGTCCGCCAGGCTCC
AGGGAAGGGGCTGGAGTGGGTCTCATCCATTAGTAGTAGTAGTAGTTACATATACTACGCA
GACTCAGTGAAGGGCCGATTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGC
AAATGAACAGCCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAGAGTAGGCCGGTA
TAACTGGAAGACGGGGCATGCTTTTGATATCTGGGGCCAGGGTACACTGGTCACCGTGAGC
TCA (SEQ. ID. NO. 21)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTC
TCCTGTGCAGCCTCTGGATTCACCTTCCGTGACTACTACGTGAGCTGGATCCGCCAGGCT
CCAGGGAAGGGGCTGGAGTGGGTCTCAAGTATTAGTGGTAGTGGGGGTAGGACATACTAC
GCAGACTCCGTGGAGGGCCGGTTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTAT
CTGCAAATGAACAGCCTGAGAGCCGAGGACACTGCCATGTATTACTGTGCCAGAGTATCC
GCCCTTCGGAGACCCATGACTACAGTAACTACTTACTGGTTCGACCCCTGGGGCCAAGGT
ACACTGGTCACCGTGAGCTCA (SEQ. ID. NO. 23)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTC
TCCTGTGCAGCCTCTGGATTCACCTTCAGTAACGCCTGGATGAGCTGGGTCCGCCAGGCT
CCAGGGAAGGGGCTGGAGTGGGTCTCCGCTATTAGTGGTAGTGGTAACACATACTATGCA
GACTCCGTGAAGGGCCGGTTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTG

CAAATGAACAGCCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAGAGCCTCCCACCGTATATTAGGTTATGCTTTTGATATCTGGGGCCAGGGTACACTGGTCACCGTGAGCTCA (SEQ. ID. NO. 25)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTAACGCCTGGATGAGCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCAAGTATTAGTGTTGGTGGACATAGGACATATTATGCAGATTCCGTGAAGGGCCGGTCCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCACGGATACGGGTGGGTCCGTCCGGCGGGGCCTTTGACTACTGGGGCCAGGGTACACTGGTCACCGTGAGCTCA (SEQ. ID. NO. 27)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTAACGCCTGGATGAGCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCATCCATTAGTAGTAGTAGTAGTTACATATACTACGCAGACTCAGTGAAGGGCCGATCCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAGGCTCACAAATATTTTGACTGGTTATTATACCTCAGGATATGCTTTTGATATCTGGGGCCAAGGTACACTGGTCACCGTGAGCTCA (SEQ. ID. NO. 29)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTAGTTCTTGGATGAGTTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCATCCATTAGTAGTAGTAGTAGTTACATATACTACGCAGACTCAGTGAAGGGCCGATTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAGAGTAGGGAACTACGGTTTCTACCACTACATGGACGTCTGGGGCCAAGGTACACTGGTCACCGTGAGCTCA (SEQ. ID. NO. 31)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTTAGTAGCTATTGGATGAGCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCATCCATTAGTAGTAGTAGTAGTTACATATACTACGCAGACTCAGTGAAGGGCCGATTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAGAATTAAACGGTTACGATTCGGCTGGACCCCTTTTGACTACTGGGGCCAGGGTACACTGGTCACCGTGAGCTCA (SEQ. ID. NO. 33)

TCCTGTGCAGCCTCTGGATTCACCTTCAGTAACGCCTGGATGAGCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCATCCATTAGTAGTAGTAGTAGTTACATATACTAC

GCAGACTCAGTGAAGGGCCGATTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAGAGTCAATAGCAAAAAGTGGTATGAGGGCTACTTCTTTGACTACTGGGGCCAGGGTACACTGGTCACCGTGAGCTCA (SEQ. ID. NO. 35)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTAACGCCTGGATGAGCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCATCCATTAGTACTAGTAGTAATTACATATACTACGCAGACTCAGTGAAGGGCCGGTTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAGAGTCAAGAAGTATAGCAGTGGCTGGTACTCGAATTATGCTTTTGATATCTGGGGCCAAGGTACACTGGTCACCGTGAGCTCA (SEQ. ID. NO. 37)

in combination with a variable light region (V_L) selected from the group of nucleic acid sequences consisting of

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCCTGCTCTGGAAGCAGGTCCAACATTGGGAATAATTATGTATCCTGGTATCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATGGTAACAACAATCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTGCAGCATGGGATGACAGCCTGAATGGTCATTGGGTGTTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT (SEQ. ID. NO. 2)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCCTGTTCTGGAAGCAGCTCCAACATCGGAAATAATGCTGTAAACTGGTATCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATGGGAATGATCGGCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTCAGACCTGGGGCACTGGCCGGGGGGTATTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT (SEQ. ID. NO. 4)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCTTGTTCTGGAAGCAGCTCCAATATCGGAAGTAATTATGTATCCTGGTATCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATGGTAACTACAATCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTGCAGCATGGGATGACAGCCTGAGTGGTTGGGTGTTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT
(SEQ. ID. NO. 6)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCCT
GCTCTGGAAGCAGCTCCAACATTGGAAATAACTATGTATCCTGGTATCAGCAGCTCCCAGGAAC
GGCCCCCAAACTCCTCATCTATAGTAATAATCAGCGGCCCTCAGGGGTCCCTGACCGATTCTCTG
GCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTG
ATTATTACTGTGCAGCATGGGATGACAGCCTGAGTCATTGGCTGTTCGGCGGAGGAACCAAGCT
GACGGTCCTAGGT
(SEQ. ID. NO. 8)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCCT
GCTCTGGAAGCAGCTCCAACATTGGGAATAATTATGTATCCTGGTATCAGCAGCTCCCAGGAAC
GGCCCCCAAACTCCTCATCTATAGGAATAATCAGCGGCCCTCAGGGGTCCCTGACCGATTCTCT
GGCTCCAAGTCTGGCACCTTAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCT
GATTATTACTGTGCAACCTGGGATGACAGCCTGAATGGTTGGGTGTTCGGCGGAGGAACCAAGC
TGACGGTCCTAGGT
(SEQ. ID. NO. 10)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCCT
GTTCTGGAAGCAGCTCCAACATTGGCGGTGAGTCTGTATCCTGGTATCAGCAGCTCCCAGGAAC
GGCCCCCAAACTCCTCATCTATAGTAATAATCAGCGGCCCTCAGGGGTCCCTGACCGATTCTCTG
GCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTG
ATTATTACTGTGCAGCATGGGATGACAGCCTGAATGGTTGGGTGTTCGGCGGAGGAACCAAGCT
GACGGTCCTAGGT
(SEQ. ID. NO. 12)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATC
TCCTGCTCTGGAAGCAGCTCCAACATTGGGAATAATTATGTATCCTGGTATCAGCAGCTC
CCAGGAACGGCCCCCAAACTCCTCATCTATAGGAATAATCAGCGGCCCTCAGGGGTCCCT
GACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGG
TCCGAGGATGAGGCTGATTATTACTGTGCAGCATGGGATGACAGCCTGAATGGTCATTGG
GTGTTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT (SEQ. ID. NO. 20)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCT
CCTGCTCTGGAAGGACCTACAACATTGGAAATAATTATGTATCGTGGTATCAGCAGCTCCC
AGGAACGGCCCCCAAACTCCTCATCTATGGTAACATCAATCGGCCCTCAGGGGTCCCTGAC
CGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCG
AGGATGAGGCTGATTATTACTGTGCAGCATGGGATGTCAGGCTGAATGGTTGGGTGTTCGG
CGGAGGAACCAAGCTGACGGTCCTAGGT (SEQ. ID. NO. 22)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCCTGCTCTGGAAGGAGCTCCAACATTGGGAATAGTTATGTCTCCTGGTATCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATAGGAATAATCAGCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTGCAGGATGGGATGACACCCTGCGTGCTTGGGTGTTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT (SEQ. ID. NO. 24)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCTTGTTCTGGAAGCCGCTCCAACATCGGGAGAAATGCTGTTAGTTGGTATCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATGCTAACAGCAATCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTGCAGCATGGGATGGCAGCCTGAATGGTTGGGTGTTCGGCGGAGGAACCAAGCTGACGGTCC (SEQ. ID. NO. 26)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCCTGCTCTGGAAGCAACACCAACATTGGGAAGAACTATGTATCTTGGTATCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATGCTAATAGCAATCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTGCGTCATGGGATGCCAGCCTGAATGGTTGGGTATTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT (SEQ. ID. NO. 28)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCCTGCTCTGGAAGCACCTCCAACATTGGGAAGAATTATGTATCCTGGTATCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATGGTAACAGCAATCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTGCAGCATGGGATGCCAGCCTCAGTGGTTGGGTGTTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT (SEQ. ID. NO. 30)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCTTGTTCTGGAGGCAGCTCAAACATCGGAAAAAGAGGTGTAAATTGGTATCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATGGTAACAGAAATCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTGCTACATGGGATTACAGCCTCAATGCTTGGGTGTTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT (SEQ. ID. NO. 32)

CAGTCTGTTCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCCTGTTCTGGAAGCAGCTCCAACATCGGAAATAATGGTGTAAACTGGTATCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATGGTAACAACAATCGGCCCTCAGGGGTCCCT

GACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGG
TCCGAGGATGAGGCTGATTATTACTGTGCAGCATGGGATGACAGCCTGCGTGGTTGGCTG
TTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT (SEQ. ID. NO. 34)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATC
TCCTGCTCTGGAAGCAGCTCCAACATTGGGAATAATTATGTATCCTGGTATCAGCAGCTC
CCAGGAACGGCCCCCAAACTCCTCATCTATGGTAACAGCAATCGGCCCTCAGGGGTCCCT
GACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGG
TCCGAGGATGAGGCTGATTATTACTGTGCAGCATGGGATGACAGTCTGAGTGGTTGGGTG
TTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT (SEQ. ID. NO. 36)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATC
TCCTGCTCTGGAAGCAGCTCCAGCATTGGGAATAATTTTGTATCCTGGTATCAGCAGCTC
CCAGGAACGGCCCCCAAACTCCTCATCTATGACAATAATAAGCGACCCTCAGGGGTCCCT
GACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGG
TCCGAGGATGAGGCTGATTATTACTGTGCAGCATGGGATGACAGCCTGAATGGTTGGGTG
TTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT (SEQ. ID. NO. 38).

23. The antibody according to claim 22, wherein the antibody comprises the variable heavy region(V_H)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCC
TGTGCAGCCTCTGGATTCACCTTCAATAACGCCTGGATGAGCTGGGTCCGCCAGGCTCCAGGGA
AGGGGCTGGAGTGGGTCTCATCCATTAGTAGTAGTAGTAGTTACATATACTACGCAGACTCAGT
GAAGGGCCGATTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGC
CTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAGAGTCAGTAGGTACTACTACGGACCAT
CTTTCTACTTTGACTCCTGGGGCCAGGGTACACTGGTCACCGTGAGCAGC

and the variable light region (V_L)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCCT
GCTCTGGAAGCAGGTCCAACATTGGGAATAATTATGTATCCTGGTATCAGCAGCTCCCAGGAAC
GGCCCCCAAACTCCTCATCTATGGTAACAACAATCGGCCCTCAGGGGTCCCTGACCGATTCTCTG
GCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTG
ATTATTACTGTGCAGCATGGGATGACAGCCTGAATGGTCATTGGGTGTTCGGCGGAGGAACCAA
GCTGACGGTCCTAGGT.

24. The antibody according to claim 22, wherein the antibody comprises the variable heavy region (V_H)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCGGCCTCTGGATTCACCTTCAGTGACTACTACATGAGCTGGGTCCGCCAGGCTCCCGGGAAGGGGCTGGAGTGGGTATCGGGTGTTAGTTGGAATGGCAGTAGGACGCACTATGCAGACTCTGTGAAGGGCCGATTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAGAGCGGCTAGGTACTCCTACTACTACTACGGTATGGACGTCTGGGGCCAAGGTACACTGGTCACCGTGAGCAGC

and the variable light region (V_L)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCCTGTTCTGGAAGCAGCTCCAACATCGGAAATAATGCTGTAAACTGGTATCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATGGGAATGATCGGCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTCAGACCTGGGGCACTGGCCGGGGGGTATTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT.

25. The antibody according to claim 22, wherein the antibody comprises the variable heavy region (V_H)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTTAGTAGCTATTGGATGAGCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCAAGTATCAGTGGTAGTGGTCGTAGGACATACTACGCAGACTCCGTGCAGGGCCGGTTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAGATTGGTCTCCTATGGTTCGGGGAGTTTCGGTTTTGACTACTGGGGCCAAGGTACACTGGTCACCGTGAGCAGC

and the variable light region (V_L)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCTTGTTCTGGAAGCAGCTCCAATATCGGAAGTAATTATGTATCCTGGTATCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATGGTAACTACAATCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTGCAGCATGGGATGACAGCCTGAGTGGTTGGGTGTTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT.

26. The antibody according to claim 22, wherein the antibody comprises the variable heavy region (V_H)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTAACGCCTGGATGAGCTGGGTCCGCCAGGTTCCAGGGAAGGGGCTGGAGTGGGTCTCAACTCTTGGTGGTAGTGGTGGTGGTAGCACATACTACGCAGACTCCGTGAAGGGCCGGTTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAAGTTAGGGGGGCGATCCCGATATGGGCGGTGGCCCCGCCAATTTGACTACTGGGGCCAAGGTACACTGGTCACCGTGAGCAGC

and the variable light region (V_L)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCCTGCTCTGGAAGCAGCTCCAACATTGGAAATAACTATGTATCCTGGTATCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATAGTAATAATCAGCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTGCAGCATGGGATGACAGCCTGAGTCATTGGCTGTTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT.

27. The antibody according to claim 22, wherein the antibody comprises the variable heavy region (V_H)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTGACTACTACATGAGCTGGATCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCAAGTATCAGTGGCCGTGGGGGTAGTTCCTACTACGCAGACTCCGTGAGGGGCCGGTTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAGACTTTCCTACAGCTATGGTTACGAGGGGGCCTACTACTTTGACTACTGGGGCCAGGGTACACTGGTCACCGTGAGCAGC

and the variable light region (V_L)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCCTGCTCTGGAAGCAGCTCCAACATTGGGAATAATTATGTATCCTGGTATCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATAGGAATAATCAGCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTTAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTGCAACCTGGGATGACAGCCTGAATGGTTGGGTGTTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT.

28. The antibody according to claim 22, wherein the antibody comprises the variable heavy region (V_H)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCC
TGTGCAGCCTCTGGATTCACCTTTAGCAGCTATGCCATGAGCTGGGTCCGCCAGGCTCCAGGGA
AGGGGCTGGAGTGGGTCTCATCCATTAGTAGTAGTGGTCGTTTCATTTACTACGCAGACTCAATG
AAGGGCCGCTTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCT
GAGAGCCGAGGACACTGCCGTGTATTACTGTACGAGGCTCCGGAGAGGGAGCTACTTCTGGGC
TTTTGATATCTGGGGCCAAGGTACACTGGTCACCGTGAGCAGC

and the variable light region (V_L)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCCT
GTTCTGGAAGCAGCTCCAACATTGGCGGTGAGTCTGTATCCTGGTATCAGCAGCTCCCAGGAAC
GGCCCCCAAACTCCTCATCTATAGTAATAATCAGCGGCCCTCAGGGGTCCCTGACCGATTCTCTG
GCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTG
ATTATTACTGTGCAGCATGGGATGACAGCCTGAATGGTTGGGTGTTCGGCGGAGGAACCAAGCT
GACGGTCCTAGGT.

29. A method for preparation of a isolated antibody according to claim 22, using a fragment library to generate specific human antibody fragments against oxidized, in particular MDA modified peptides derived from Apo B100, whereupon identified antibody fragments having the desired characteristics are rebuilt into full length human immunoglobulin to be used for therapeutic purposes.

30. The method for amplification of a isolated human antibody according to claim 22, using a recombinant technology, comprising transfer of genes encoding the variable parts of selected scFv to full length human IgG1 vestors using a PCR-amplification wherein primers used, are:

primers for amplification of VH-segments:
5'VH: 5'-GGT*GTGCATTC*CGAGGTGCAGCTGTTGGAG (SEQ. ID. NO: 13)
3'VH: 5'-GA*CGTACG***ACTCACCT**GAGCTCACGGTGACCAG (SEQ. ID. NO: 14)

and primers for amplification of VL-segments:
5'VL: 5'-GGT*GTGCATTC*CCAGTCTGTGCTGACTCAG (SEQ. ID. NO: 15)
3'VL: 5'-GA*CGTACG*TTCTACTCACCTAGGACCGTCAGCTT (SEQ. ID. NO: 16).

31. The method according to claim 30, wherein colonies containing heavy chain regions and light chain region plasmids with variable heavy region and variable light chain inserts were identified by colony PCR using
Forward primer: 5'-ATGGGTGACAATGACATC (SEQ. ID. NO: 17)

Reverse primer: 5'-AAGCTTGCTAGCGTACG (SEQ. ID. NO: 18).

32. The method for passive immunization of mammals, preferably humans, wherein a therapeutically or prophylactically effective amount of a isolated human antibody directed towards at least one oxidized fragment of apolipoprotein B is administered for treatment of atherosclerosis.

33. The method according to claim 32, the oxidized fragment is selected from one or more of the group consisting of
FLDTVYGNCSTHFTVKTRKG
PQCSTHILQWLKRVHANPLL
VISIPRLQAEARSEILAHWS
KLVKEALKESQLPTVMDFRK
LKFVTQAEGAKQTEATMTFK
DGSLRHKFLDSNIKFSHVEK
KGTYGLSCQRDPNTGRLNGE
RLNGESNLRFNSSYLQGTNQ
SLTSTSDLQSGIIKNTASLK
TASLKYENYELTLKSDTNGK
DMTFSKQNALLRSEYQADYE
MKVKIIRTIDQMQNSELQWP
IALDDAKINFNEKLSQLQTY
KTTKQSFDLSVKAQYKKNKH
EEEMLENVSLVCPKDATRFK
GSTSHHLVSRKSISAALEHK
IENIDFNKSGSSTASWIQNV
IREVTQRLNGEIQALELPQK
EVDVLTKYSQPEDSLIPFFE
HTFLIYITELLKKLQSTTVM
LLDIANYLMEQIQDDCTGDE
CTGDEDYTYKIKRVIGNMGQ
GNMGQTMEQLTPELKSSILK
SSILKCVQSTKPSLMIQKAA
IQKAAIQALRKMEPKDKDQE
RLNGESNLRFNSSYLQGTNQ
SLNSHGLELNADILGTDKIN
WIQNVDTKYQIRIQIQEKLQ
TYISDWWTLAAKNLTDFAEQ
EATLQRIYSLWEHSTKNHLQ

ALLVPPETEEAKQVLFLDTV
IEIGLEGKGFEPTLEALFGK
SGASMKLTTNGRFREHNAKF
NLIGDFEVAEKINAFRAKVH
GHSVLTAKGMALFGEGKAEF
FKSSVITLNTNAELFNQSDI
FPDLGQEVALNANTKNQKIR,
or an active site thereof.

34. The method according to claim 32, wherein the antibody comprises antibodies raised against fragments of apo B100 comprising a variable heavy region (V_H) selected from the group of nucleic acid sequences consisting of

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAATAACGCCTGGATGAGCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCATCCATTAGTAGTAGTAGTAGTTACATATACTACGCAGACTCAGTGAAGGGCCGATTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAGAGTCAGTAGGTACTACTACGGACCATCTTTCTACTTTGACTCCTGGGGCCAGGGTACACTGGTCACCGTGAGCAGC (SEQ. ID. NO. 1)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCGGCCTCTGGATTCACCTTCAGTGACTACTACATGAGCTGGGTCCGCCAGGCTCCCGGGAAGGGGCTGGAGTGGGTATCGGGTGTTAGTTGGAATGGCAGTAGGACGCACTATGCAGACTCTGTGAAGGGCCGATTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAGAGCGGCTAGGTACTCCTACTACTACTACGGTATGGACGTCTGGGGCCAAGGTACACTGGTCACCGTGAGCAGC (SEQ. ID. NO. 3)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTTAGTAGCTATTGGATGAGCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCAAGTATCAGTGGTAGTGGTCGTAGGACATACTACGCAGACTCCGTGCAGGGCCGGTTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAGATTGGTCTCCTATGGTTCGGGGAGTTTCGGTTTTGACTACTGGGGCCAAGGTACACTGGTCACCGTGAGCAGC(SEQ. ID. NO. 5)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTAACGCCTGGATGAGCTGGGTCCGCCAGGTTCCAGGGAAGGGGCTGGAGTGGGTCTCAACTCTTGGTGGTAGTGGTGGTGGTAGCACATACTACGCAGACTCCGTGAAGGGCCGGTTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAAGTTAGGGGGGCGATCCCGATAT

GGGCGGTGGCCCCGCCAATTTGACTACTGGGGCCAAGGTACACTGGTCACCGTGAGCAGC (SEQ. ID. NO. 7)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTGACTACTACATGAGCTGGATCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCAAGTATCAGTGGCCGTGGGGGTAGTTCCTACTACGCAGACTCCGTGAGGGGCCGGTTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAGACTTTCCTACAGCTATGGTTACGAGGGGGCCTACTACTTTGACTACTGGGGCCAGGGTACACTGGTCACCGTGAGCAGC (SEQ. ID. NO. 9)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTTAGCAGCTATGCCATGAGCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCATCCATTAGTAGTAGTGGTCGTTTCATTTACTACGCAGACTCAATGAAGGGCCGCTTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACTGCCGTGTATTACTGTACGAGGCTCCGGAGAGGGAGCTACTTCTGGGCTTTTGATATCTGGGGCCAAGGTACACTGGTCACCGTGAGCAGC (SEQ. ID. NO. 11)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTTAGAACGTATTGGATGACCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCATCTATTAGCAGTAGCAGTAATTACATATTCTACGCAGACTCAGTGAAGGGCCGATTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAGACTCAGACGGAGCAGCTGGTACGGGGGGTACTGGTTCGACCCCTGGGGCCAAGGTACACTGGTCACCGTGAGCTCA (SEQ. ID. NO. 19)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTAGCAACTACATGAGCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCATCCATTAGTAGTAGTAGTAGTTACATATACTACGCAGACTCAGTGAAGGGCCGATTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAGAGTAGGCCGGTATAACTGGAAGACGGGGCATGCTTTTGATATCTGGGGCCAGGGTACACTGGTCACCGTGAGCTCA (SEQ. ID. NO. 21)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCCGTGACTACTACGTGAGCTGGATCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCAAGTATTAGTGGTAGTGGGGGTAGGACATACTACGCAGACTCCGTGGAGGGCCGGTTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTAT

CTGCAAATGAACAGCCTGAGAGCCGAGGACACTGCCATGTATTACTGTGCCAGAGTATCCGCCCTTCGGAGACCCATGACTACAGTAACTACTTACTGGTTCGACCCCTGGGGCCAAGGTACACTGGTCACCGTGAGCTCA (SEQ. ID. NO. 23)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTAACGCCTGGATGAGCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCCGCTATTAGTGGTAGTGGTAACACATACTATGCAGACTCCGTGAAGGGCCGGTTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAGAGCCTCCCACCGTATATTAGGTTATGCTTTTGATATCTGGGGCCAGGGTACACTGGTCACCGTGAGCTCA (SEQ. ID. NO. 25)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTAACGCCTGGATGAGCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCAAGTATTAGTGTTGGTGGACATAGGACATATTATGCAGATTCCGTGAAGGGCCGGTCCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCACGGATACGGGTGGGTCCGTCCGGCGGGGCCTTTGACTACTGGGGCCAGGGTACACTGGTCACCGTGAGCTCA (SEQ. ID. NO. 27)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTAACGCCTGGATGAGCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCATCCATTAGTAGTAGTAGTAGTTACATATACTACGCAGACTCAGTGAAGGGCCGATCCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAGGCTCACAAATATTTTGACTGGTTATTATACCTCAGGATATGCTTTTGATATCTGGGGCCAAGGTACACTGGTCACCGTGAGCTCA (SEQ. ID. NO. 29)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTAGTTCTTGGATGAGTTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCATCCATTAGTAGTAGTAGTAGTTACATATACTACGCAGACTCAGTGAAGGGCCGATTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAGAGTAGGGAACTACGGTTTCTACCACTACATGGACGTCTGGGGCCAAGGTACACTGGTCACCGTGAGCTCA (SEQ. ID. NO. 31)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTTAGTAGCTATTGGATGAGCTGGGTCCGCCAGGCT

CCAGGGAAGGGGCTGGAGTGGGTCTCATCCATTAGTAGTAGTAGTAGTTACATATACTACGCAGACTCAGTGAAGGGCCGATTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAGAATTAAACGGTTACGATTCGGCTGGACCCCTTTTGACTACTGGGGCCAGGGTACACTGGTCACCGTGAGCTCA (SEQ. ID. NO. 33)

TCCTGTGCAGCCTCTGGATTCACCTTCAGTAACGCCTGGATGAGCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCATCCATTAGTAGTAGTAGTAGTTACATATACTACGCAGACTCAGTGAAGGGCCGATTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAGAGTCAATAGCAAAAAGTGGTATGAGGGCTACTTCTTTGACTACTGGGGCCAGGGTACACTGGTCACCGTGAGCTCA (SEQ. ID. NO. 35)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTAACGCCTGGATGAGCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCATCCATTAGTACTAGTAGTAATTACATATACTACGCAGACTCAGTGAAGGGCCGGTTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAGAGTCAAGAAGTATAGCAGTGGCTGGTACTCGAATTATGCTTTTGATATCTGGGGCCAAGGTACACTGGTCACCGTGAGCTCA (SEQ. ID. NO. 37)

in combination with a variable light region (V_L) selected from the group of nucleic acid sequences consisting of

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCCTGCTCTGGAAGCAGGTCCAACATTGGGAATAATTATGTATCCTGGTATCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATGGTAACAACAATCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTGCAGCATGGGATGACAGCCTGAATGGTCATTGGGTGTTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT (SEQ. ID. NO. 2)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCCTGTTCTGGAAGCAGCTCCAACATCGGAAATAATGCTGTAAACTGGTATCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATGGGAATGATCGGCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTCAGACCTGGGGCACTGGCCGGGGGGTATTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT (SEQ. ID. NO. 4)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCTTGTTCTGGAAGCAGCTCCAATATCGGAAGTAATTATGTATCCTGGTATCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATGGTAACTACAATCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTGCAGCATGGGATGACAGCCTGAGTGGTTGGGTGTTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT

(SEQ. ID. NO. 6)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCCTGCTCTGGAAGCAGCTCCAACATTGGAAATAACTATGTATCCTGGTATCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATAGTAATAATCAGCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTGCAGCATGGGATGACAGCCTGAGTCATTGGCTGTTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT

(SEQ. ID. NO. 8)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCCTGCTCTGGAAGCAGCTCCAACATTGGGAATAATTATGTATCCTGGTATCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATAGGAATAATCAGCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTTAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTGCAACCTGGGATGACAGCCTGAATGGTTGGGTGTTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT

(SEQ. ID. NO. 10)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCCTGTTCTGGAAGCAGCTCCAACATTGGCGGTGAGTCTGTATCCTGGTATCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATAGTAATAATCAGCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTGCAGCATGGGATGACAGCCTGAATGGTTGGGTGTTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT

(SEQ. ID. NO. 12)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCCTGCTCTGGAAGCAGCTCCAACATTGGGAATAATTATGTATCCTGGTATCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATAGGAATAATCAGCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTGCAGCATGGGATGACAGCCTGAATGGTCATTGGGTGTTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT (SEQ. ID. NO. 20)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCCTGCTCTGGAAGGACCTACAACATTGGAAATAATTATGTATCGTGGTATCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATGGTAACATCAATCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTGCAGCATGGGATGTCAGGCTGAATGGTTGGGTGTTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT (SEQ. ID. NO. 22)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCCTGCTCTGGAAGGAGCTCCAACATTGGGAATAGTTATGTCTCCTGGTATCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATAGGAATAATCAGCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTGCAGGATGGGATGACACCCTGCGTGCTTGGGTGTTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT (SEQ. ID. NO. 24)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCTTGTTCTGGAAGCCGCTCCAACATCGGGAGAAATGCTGTTAGTTGGTATCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATGCTAACAGCAATCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTGCAGCATGGGATGGCAGCCTGAATGGTTGGGTGTTCGGCGGAGGAACCAAGCTGACGGTCC (SEQ. ID. NO. 26)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCCTGCTCTGGAAGCAACACCAACATTGGGAAGAACTATGTATCTTGGTATCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATGCTAATAGCAATCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTGCGTCATGGGATGCCAGCCTGAATGGTTGGGTATTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT (SEQ. ID. NO. 28)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCCTGCTCTGGAAGCACCTCCAACATTGGGAAGAATTATGTATCCTGGTATCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATGGTAACAGCAATCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTGCAGCATGGGATGCCAGCCTCAGTGGTTGGGTGTTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT (SEQ. ID. NO. 30)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCTTGTTCTGGAGGCAGCTCAAACATCGGAAAAAGAGGTGTAAATTGGTATCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATGGTAACAGAAATCGGCCCTCAGGGGTCCCT

GACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTGCTACATGGGATTACAGCCTCAATGCTTGGGTGTTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT (SEQ. ID. NO. 32)

CAGTCTGTTCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCCTGTTCTGGAAGCAGCTCCAACATCGGAAATAATGGTGTAAACTGGTATCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATGGTAACAACAATCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTGCAGCATGGGATGACAGCCTGCGTGGTTGGCTGTTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT (SEQ. ID. NO. 34)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCCTGCTCTGGAAGCAGCTCCAACATTGGGAATAATTATGTATCCTGGTATCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATGGTAACAGCAATCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTGCAGCATGGGATGACAGTCTGAGTGGTTGGGTGTTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT (SEQ. ID. NO. 36)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCCTGCTCTGGAAGCAGCTCCAGCATTGGGAATAATTTTGTATCCTGGTATCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATGACAATAATAAGCGACCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTGCAGCATGGGATGACAGCCTGAATGGTTGGGTGTTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT (SEQ. ID. NO. 38).

35. The method according to claim 34, wherein the antibody comprises the variable heavy region(V_H)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAATAACGCCTGGATGAGCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCATCCATTAGTAGTAGTAGTAGTTACATATACTACGCAGACTCAGTGAAGGGCCGATTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAGAGTCAGTAGGTACTACTACGGACCATCTTTCTACTTTGACTCCTGGGGCCAGGGTACACTGGTCACCGTGAGCAGC

and the variable light region (V_L)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCCTGCTCTGGAAGCAGGTCCAACATTGGGAATAATTATGTATCCTGGTATCAGCAGCTCCCAGGAAC

GGCCCCCAAACTCCTCATCTATGGTAACAACAATCGGCCCTCAGGGGTCCCTGACCGATTCTCTG
GCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTG
ATTATTACTGTGCAGCATGGGATGACAGCCTGAATGGTCATTGGGTGTTCGGCGGAGGAACCAA
GCTGACGGTCCTAGGT.

36. The method according to claim 34, wherein the antibody comprises the variable heavy region (V_H)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCC
TGTGCGGCCTCTGGATTCACCTTCAGTGACTACTACATGAGCTGGGTCCGCCAGGCTCCCGGGA
AGGGGCTGGAGTGGGTATCGGGTGTTAGTTGGAATGGCAGTAGGACGCACTATGCAGACTCTG
TGAAGGGCCGATTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAG
CCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAGAGCGGCTAGGTACTCCTACTACTAC
TACGGTATGGACGTCTGGGGCCAAGGTACACTGGTCACCGTGAGCAGC

and the variable light region (V_L)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCCT
GTTCTGGAAGCAGCTCCAACATCGGAAATAATGCTGTAAACTGGTATCAGCAGCTCCCAGGAAC
GGCCCCCAAACTCCTCATCTATGGGAATGATCGGCGGCCCTCAGGGGTCCCTGACCGATTCTCT
GGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCT
GATTATTACTGTCAGACCTGGGGCACTGGCCGGGGGGTATTCGGCGGAGGAACCAAGCTGACG
GTCCTAGGT.

37. The method according to claim 34, wherein the antibody comprises the variable heavy region (V_H)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCC
TGTGCAGCCTCTGGATTCACCTTTAGTAGCTATTGGATGAGCTGGGTCCGCCAGGCTCCAGGGA
AGGGGCTGGAGTGGGTCTCAAGTATCAGTGGTAGTGGTCGTAGGACATACTACGCAGACTCCGT
GCAGGGCCGGTTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGC
CTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAGATTGGTCTCCTATGGTTCGGGGAGTT
TCGGTTTTGACTACTGGGGCCAAGGTACACTGGTCACCGTGAGCAGC

and the variable light region (V_L)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCTT
GTTCTGGAAGCAGCTCCAATATCGGAAGTAATTATGTATCCTGGTATCAGCAGCTCCCAGGAACG
GCCCCCAAACTCCTCATCTATGGTAACTACAATCGGCCCTCAGGGGTCCCTGACCGATTCTCTGG

CTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTGCAGCATGGGATGACAGCCTGAGTGGTTGGGTGTTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT.

38. The method according to claim 34, wherein the antibody comprises the variable heavy region (V_H)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTAACGCCTGGATGAGCTGGGTCCGCCAGGTTCCAGGGAAGGGGCTGGAGTGGGTCTCAACTCTTGGTGGTAGTGGTGGTGGTAGCACATACTACGCAGACTCCGTGAAGGGCCGGTTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAAGTTAGGGGGGCGATCCCGATATGGGCGGTGGCCCCGCCAATTTGACTACTGGGGCCAAGGTACACTGGTCACCGTGAGCAGC

and the variable light region (V_L)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCCTGCTCTGGAAGCAGCTCCAACATTGGAAATAACTATGTATCCTGGTATCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATAGTAATAATCAGCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTGCAGCATGGGATGACAGCCTGAGTCATTGGCTGTTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT.

39. The method according to claim 34, wherein the antibody comprises the variable heavy region (V_H)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTGACTACTACATGAGCTGGATCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCAAGTATCAGTGGCCGTGGGGGTAGTTCCTACTACGCAGACTCCGTGAGGGGCCGGTTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAGACTTTCCTACAGCTATGGTTACGAGGGGGCCTACTACTTTGACTACTGGGGCCAGGGTACACTGGTCACCGTGAGCAGC

and the variable light region (V_L)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCCTGCTCTGGAAGCAGCTCCAACATTGGGAATAATTATGTATCCTGGTATCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATAGGAATAATCAGCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTTAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCT

GATTATTACTGTGCAACCTGGGATGACAGCCTGAATGGTTGGGTGTTCGGCGGAGGAACCAAGC
TGACGGTCCTAGGT.

40. The method according to claim 34, wherein the antibody comprises the variable heavy region (V_H)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCC
TGTGCAGCCTCTGGATTCACCTTTAGCAGCTATGCCATGAGCTGGGTCCGCCAGGCTCCAGGGA
AGGGGCTGGAGTGGGTCTCATCCATTAGTAGTAGTGGTCGTTTCATTTACTACGCAGACTCAATG
AAGGGCCGCTTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCT
GAGAGCCGAGGACACTGCCGTGTATTACTGTACGAGGCTCCGGAGAGGGAGCTACTTCTGGGC
TTTTGATATCTGGGGCCAAGGTACACTGGTCACCGTGAGCAGC

and the variable light region (V_L)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCCT
GTTCTGGAAGCAGCTCCAACATTGGCGGTGAGTCTGTATCCTGGTATCAGCAGCTCCCAGGAAC
GGCCCCCAAACTCCTCATCTATAGTAATAATCAGCGGCCCTCAGGGGTCCCTGACCGATTCTCTG
GCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTG
ATTATTACTGTGCAGCATGGGATGACAGCCTGAATGGTTGGGTGTTCGGCGGAGGAACCAAGCT
GACGGTCCTAGGT.

41. The method according to claim 34, wherein the antibody comprises the variable heavy region (V_H)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTC
TCCTGTGCAGCCTCTGGATTCACCTTTAGAACGTATTGGATGACCTGGGTCCGCCAGGCT
CCAGGGAAGGGGCTGGAGTGGGTCTCATCTATTAGCAGTAGCAGTAATTACATATTCTAC
GCAGACTCAGTGAAGGGCCGATTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTAT
CTGCAAATGAACAGCCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAGACTCAGA
CGGAGCAGCTGGTACGGGGGGTACTGGTTCGACCCCTGGGGCCAAGGTACACTGGTCACC
GTGAGCTCA

and the variable light region (V_L)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATC
TCCTGCTCTGGAAGCAGCTCCAACATTGGGAATAATTATGTATCCTGGTATCAGCAGCTC
CCAGGAACGGCCCCCAAACTCCTCATCTATAGGAATAATCAGCGGCCCTCAGGGGTCCCT
GACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGG

TCCGAGGATGAGGCTGATTATTACTGTGCAGCATGGGATGACAGCCTGAATGGTCATTGG
GTGTTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT.

42. The method according to claim 34, wherein the antibody comprises the variable heavy region (V_H)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCT
CCTGTGCAGCCTCTGGATTCACCTTCAGTAGCAACTACATGAGCTGGGTCCGCCAGGCTCC
AGGGAAGGGGCTGGAGTGGGTCTCATCCATTAGTAGTAGTAGTAGTTACATATACTACGCA
GACTCAGTGAAGGGCCGATTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGC
AAATGAACAGCCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAGAGTAGGCCGGTA
TAACTGGAAGACGGGGCATGCTTTTGATATCTGGGGCCAGGGTACACTGGTCACCGTGAGC
TCA

and the variable light region (V_L)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCT
CCTGCTCTGGAAGGACCTACAACATTGGAAATAATTATGTATCGTGGTATCAGCAGCTCCC
AGGAACGGCCCCCAAACTCCTCATCTATGGTAACATCAATCGGCCCTCAGGGGTCCCTGAC
CGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCG
AGGATGAGGCTGATTATTACTGTGCAGCATGGGATGTCAGGCTGAATGGTTGGGTGTTCGG
CGGAGGAACCAAGCTGACGGTCCTAGGT.

43. The method according to claim 34, wherein the antibody comprises the variable heavy region (V_H)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTC
TCCTGTGCAGCCTCTGGATTCACCTTCCGTGACTACTACGTGAGCTGGATCCGCCAGGCT
CCAGGGAAGGGGCTGGAGTGGGTCTCAAGTATTAGTGGTAGTGGGGGTAGGACATACTAC
GCAGACTCCGTGGAGGGCCGGTTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTAT
CTGCAAATGAACAGCCTGAGAGCCGAGGACACTGCCATGTATTACTGTGCCAGAGTATCC
GCCCTTCGGAGACCCATGACTACAGTAACTACTTACTGGTTCGACCCCTGGGGCCAAGGT
ACACTGGTCACCGTGAGCTCA

and the variable light region (V_L)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATC

TCCTGCTCTGGAAGGAGCTCCAACATTGGGAATAGTTATGTCTCCTGGTATCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATAGGAATAATCAGCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTGCAGGATGGGATGACACCCTGCGTGCTTGGGTGTTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT.

44. The method according to claim 34, wherein the antibody comprises the variable heavy region (V_H)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTAACGCCTGGATGAGCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCCGCTATTAGTGGTAGTGGTAACACATACTATGCAGACTCCGTGAAGGGCCGGTTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAGAGCCTCCCACCGTATATTAGGTTATGCTTTTGATATCTGGGGCCAGGGTACACTGGTCACCGTGAGCTCA

and the variable light region (V_L)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCTTGTTCTGGAAGCCGCTCCAACATCGGGAGAAATGCTGTTAGTTGGTATCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATGCTAACAGCAATCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTGCAGCATGGGATGGCAGCCTGAATGGTTGGGTGTTCGGCGGAGGAACCAAGCTGACGGTCC.

45. The method according to claim 34, wherein the antibody comprises the variable heavy region (V_H)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTAACGCCTGGATGAGCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCAAGTATTAGTGTTGGTGGACATAGGACATATTATGCAGATTCCGTGAAGGGCCGGTCCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCACGGATACGGGTGGGTCCGTCCGGCGGGGCCTTTGACTACTGGGGCCAGGGTACACTGGTCACCGTGAGCTCA

and the variable light region (V_L)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCAT
CTCCTGCTCTGGAAGCAACACCAACATTGGGAAGAACTATGTATCTTGGTATCAGCAGC
TCCCAGGAACGGCCCCCAAACTCCTCATCTATGCTAATAGCAATCGGCCCTCAGGGGTC
CCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCT
CCGGTCCGAGGATGAGGCTGATTATTACTGTGCGTCATGGGATGCCAGCCTGAATGGTT
GGGTATTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT.

46. The method according to claim 34, wherein the antibody comprises the variable heavy region (V_H)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTC
TCCTGTGCAGCCTCTGGATTCACCTTCAGTAACGCCTGGATGAGCTGGGTCCGCCAGGCT
CCAGGGAAGGGGCTGGAGTGGGTCTCATCCATTAGTAGTAGTAGTAGTTACATATACTAC
GCAGACTCAGTGAAGGGCCGATCCACCATCTCCAGAGACAATTCCAAGAACACGCTGTAT
CTGCAAATGAACAGCCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAGGCTCACA
AATATTTTGACTGGTTATTATACCTCAGGATATGCTTTTGATATCTGGGGCCAAGGTACA
CTGGTCACCGTGAGCTCA

and the variable light region (V_L)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATC
TCCTGCTCTGGAAGCACCTCCAACATTGGGAAGAATTATGTATCCTGGTATCAGCAGCTC
CCAGGAACGGCCCCCAAACTCCTCATCTATGGTAACAGCAATCGGCCCTCAGGGGTCCCT
GACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGG
TCCGAGGATGAGGCTGATTATTACTGTGCAGCATGGGATGCCAGCCTCAGTGGTTGGGTG
TTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT.

47. The method according to claim 34, wherein the antibody comprises the variable heavy region (V_H)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTC
TCCTGTGCAGCCTCTGGATTCACCTTCAGTAGTTCTTGGATGAGTTGGGTCCGCCAGGCT
CCAGGGAAGGGGCTGGAGTGGGTCTCATCCATTAGTAGTAGTAGTAGTTACATATACTAC
GCAGACTCAGTGAAGGGCCGATTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTAT
CTGCAAATGAACAGCCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAGAGTAGGG
AACTACGGTTTCTACCACTACATGGACGTCTGGGGCCAAGGTACACTGGTCACCGTGAGC

TCA

and the variable light region (V_L)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATC
TCTTGTTCTGGAGGCAGCTCAAACATCGGAAAAAGAGGTGTAAATTGGTATCAGCAGCTC
CCAGGAACGGCCCCCAAACTCCTCATCTATGGTAACAGAAATCGGCCCTCAGGGGTCCCT
GACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGG
TCCGAGGATGAGGCTGATTATTACTGTGCTACATGGGATTACAGCCTCAATGCTTGGGTG
TTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT.

48. The method according to claim 34, wherein the antibody comprises the variable heavy region (V_H)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTC
TCCTGTGCAGCCTCTGGATTCACCTTTAGTAGCTATTGGATGAGCTGGGTCCGCCAGGCT
CCAGGGAAGGGGCTGGAGTGGGTCTCATCCATTAGTAGTAGTAGTAGTTACATATACTAC
GCAGACTCAGTGAAGGGCCGATTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTAT
CTGCAAATGAACAGCCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAGAATTAAA
CGGTTACGATTCGGCTGGACCCCTTTTGACTACTGGGGCCAGGGTACACTGGTCACCGTG
AGCTCA

and the variable light region (V_L)

CAGTCTGTTCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATC
TCCTGTTCTGGAAGCAGCTCCAACATCGGAAATAATGGTGTAAACTGGTATCAGCAGCTC
CCAGGAACGGCCCCCAAACTCCTCATCTATGGTAACAACAATCGGCCCTCAGGGGTCCCT
GACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGG
TCCGAGGATGAGGCTGATTATTACTGTGCAGCATGGGATGACAGCCTGCGTGGTTGGCTG
TTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT.

49. The method according to claim 34, wherein the antibody comprises the variable heavy region (V_H)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTC
TCCTGTGCAGCCTCTGGATTCACCTTCAGTAACGCCTGGATGAGCTGGGTCCGCCAGGCT
CCAGGGAAGGGGCTGGAGTGGGTCTCATCCATTAGTAGTAGTAGTAGTTACATATACTAC

GCAGACTCAGTGAAGGGCCGATTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAGAGTCAATAGCAAAAAGTGGTATGAGGGCTACTTCTTTGACTACTGGGGCCAGGGTACACTGGTCACCGTGAGCTCA

and the variable light region (V_L)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCCTGCTCTGGAAGCAGCTCCAACATTGGGAATAATTATGTATCCTGGTATCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATGGTAACAGCAATCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTGCAGCATGGGATGACAGTCTGAGTGGTTGGGTGTTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT.

50. The method according to claim 34, wherein the antibody comprises the variable heavy region (V_H)

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTAACGCCTGGATGAGCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCATCCATTAGTACTAGTAGTAATTACATATACTACGCAGACTCAGTGAAGGGCCGGTTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACTGCCGTGTATTACTGTGCGAGAGTCAAGAAGTATAGCAGTGGCTGGTACTCGAATTATGCTTTTGATATCTGGGGCCAAGGTACACTGGTCACCGTGAGCTCA

and the variable light region (V_L)

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCCTGCTCTGGAAGCAGCTCCAGCATTGGGAATAATTTTGTATCCTGGTATCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATGACAATAATAAGCGACCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTGCAGCATGGGATGACAGCCTGAATGGTTGGGTGTTCGGCGGAGGAACCAAGCTGACGGTCCTAGGT.

51. A pharmaceutical composition comprising an isolated human antibody directed towards at least one oxidized fragment of apolipoprotein B for therapeutical or

prophylactical treatment of atherosclerosis by means of passive immunization, which antibody is present in combination with a pharmaceutical excipient.